

CLAIMS

1. Method for device management by managing objects in devices in a device management system in a mobile network infrastructure, the system comprising
5 a first server with a first device management application using a first protocol, a second server with a second device management application using a second protocol, an interface between them and a device with objects to be managed, the method being
c h a r a c t e r i z e d by the following steps in combination
10 a) the first management application initiating a device management session with the interface in order to manage the objects in said device,
b) the interface translating the objects to be managed into a form understood by the second management application and invoking management operations to be made by the second management application,
15 c) the first management application performing the management operations to said device.
2. Method of claim 1, c h a r a c t e r i z e d by the further steps in which
d) the first management application responds to the interface,
20 e) the interface translates the objects to be managed into a form understood by the first management application, and
f) the first management application continues said device management session with the interface.
- 25 3. Method of claim 1, c h a r a c t e r i z e d in that the mobile network infrastructure comprises the GSM network and a public network, such as internet.
- 30 4. Method of claim 2, c h a r a c t e r i z e d in that the device with the objects to be managed is selected from a SIM card in a mobile station, a USIM card in a

mobile station, a handset in a mobile station, and a smart card in a computer connected to a handset in a mobile station.

- 5 5. Method of any of claims 1 - 3, c h a r a c t e r i z e d in that the first device management application uses the SyncML DM protocol.
6. Method of claim 3 or 4, c h a r a c t e r i z e d in that the device with the objects to be managed is the SIM card in a mobile station and the second device management application uses a SIM File Management (SFM) protocol.
- 10 7. Method of any of claims 1 - 6, c h a r a c t e r i z e d in that in the translation of step b), the data objects to be managed are OMA-DM managed objects that are mapped onto data entities residing on SIM understood by a SIM File Management (SFM) protocol .
- 15 8. Method of claim 7 c h a r a c t e r i z e d in for each OMA-DM protocol command, the translation is performed by selecting the appropriate RFM protocol command equivalent based on the mobile device type, more specifically, the SIM card type.
- 20 9. Method of any of claims 1 - 8, c h a r a c t e r i z e d in that after step a), the interface checks the identity of the device by means of a subscription identity, such as IMSI or MSISDN, and handset identity, such as the IMEI from a repository in the infrastructure.
- 25 10. Method of claim 9, c h a r a c t e r i z e d in that the RFM protocol command includes also the selection of the transport channel.
- 30 11. Method of any of claims 1 - 10, c h a r a c t e r i z e d in that the interface translating the objects to be managed is an application making use of a

conversion map holding the relationships between objects to be managed of different protocols.

- 5 12. System for managing objects in devices in a device management system in a mobile network infrastructure, the system comprising
a first server with a first device management application using a first protocol,
a second server with a second device management application using a second
protocol,
an interface between them implementing protocol conversion,
10 a database storing mapping relationships between first protocol objects to be managed and second protocol objects to be managed, and
a device with second protocol objects to be managed.
- 15 13. System of claim 12, c h a r a c t e r i z e d in that the mobile network infrastructure comprises the GSM network and a public network, such as internet.
- 20 14. System of claim 12 or 13, c h a r a c t e r i z e d in that the device with the objects to be managed is selected from a SIM card in a mobile station, an USIM card in a mobile station, a handset in a mobile station, and a smart card in a computer connected to a handset in a mobile station.
- 25 15. System of claim 12, c h a r a c t e r i z e d in that said first protocol is the SyncML DM protocol.
16. System of claim 14 and 15, c h a r a c t e r i z e d in that the device with the objects to be managed is the SIM card in a mobile station and said second protocol is a SIM File Management (SFM) protocol.
- 30 17. System of any of claims 12 - 16, c h a r a c t e r i z e d in that the first protocol objects to be managed are managed Objects (MO) according to the SyncML

DM protocol and the second protocol objects to be managed are SIM files according to a SIM File Management (SFM) protocol.